Listing of Claims

1. (Currently Amended) A method of increasing an immune response to an opportunistic infection in an immunocompromised subject comprising

selecting an immunocompromised subject infected with a secondary infection, wherein the immunocompromised subject is immunocompromised as a result of an infection with human immunodeficiency virus (HIV) or a simian immunodeficiency virus (SIV), and wherein the secondary infection is infection with a *Leishmania*;

administering to the immunocompromised subject infected with the secondary infection a therapeutically effective amount of an immunostimulatory D oligodeoxynucleotide, wherein the D oligodeoxynucleotide is at least 18 nucleotides to about 30 nucleotides in length and comprises a sequence represented by the following formula:

5' $X_1X_2X_3$ Pu_1 Py_2 CpG Pu_3 Py_4 $X_4X_5X_6(W)_M(G)_N$-3' (SEQ ID NO : 22)

wherein the central CpG motif is unmethylated, Pu is a purine nucleotide, Py is a pyrimidine nucleotide, X and W are any nucleotide, M is any integer from 0 to 10, and N is any integer from 4 to 10; and

assessing the immune response to the *Leishmania* ~~secondary infection~~ in the subject;

thereby increasing the response to the *Leishmania* ~~secondary infection~~ in the immunocompromised subject.

2-3. (Canceled).

4. (Currently Amended) The method of claim [[2]] 1, wherein the human immunodeficiency virus is HIV-1.

5. (Currently Amended) The method of claim [[2]] 1, wherein the human immunodeficiency virus is HIV-2.

6. (Currently Amended) The method of claim [[1]] 1, wherein the subject has acquired immune deficiency syndrome (AIDS).

7. (Canceled).

8. (Previously Presented) The method of claim 1, wherein N is 6.

9. (Previously Presented) The method of claim 1, wherein Pu_1 Py_2 CpG Pu_3 Py_4 comprises phosphodiester bases.

10. (Previously Presented) The method of claim 1, wherein $Pu_1Py_2CpGPu_3$ Py_4 are phosphodiester bases.

11. (Previously Presented) The method of claim 1, wherein $X_1X_2X_3$ and $X_4X_5X_6(W)_M$ $(G)_N$ comprise phosphodiester bases.

12. (Previously Presented) The method of claim 1, wherein $X_1X_2X_3$ comprises one or more phosphorothioate bases.

13. (Previously Presented) The method of claim 1, wherein $X_4X_5X_6(W)_M(G)_N$ comprises one or more phosphorothioate bases.

14. (Previously Presented) The method of claim 1, wherein $X_1X_2X_3$ Pu_1Py_2 and Pu_3 Py_4 $X_4X_5X_6$ are self complementary.

15-17. (Canceled).

18. (Previously Presented) The method of claim 4, further comprising administering to the subject a combination of drugs which comprises a highly active anti-retroviral therapy (HAART).

19. (Original) The method of claim 2, further comprising administering an anti-retroviral drug.

20. (Previously Presented) The method of claim 19, wherein the anti-retroviral drug comprises 3'-azido-3'dexoy-thymidine (AZT).

21. (Original) The method of claim 1, wherein the oligodeoxynucleotide comprises a sequence selected from the group consisting of SEQ ID NO: 1, SEQ ID NO: 2, SEQ ID NO: 3, SEQ ID NO: 4, SEQ ID NO: 5, SEQ ID NO: 6, SEQ ID NO: 7, SEQ ID NO: 8, SEQ ID NO: 9, SEQ ID NO: 10, SEQ ID NO: 11, SEQ ID NO: 12, SEQ ID NO: 13, SEQ ID NO: 14, SEQ ID NO: 15, and SEQ ID NO: 16.

22-24. (Canceled).

25. (Currently Amended) A method of increasing an immune response to an opportunistic infection with a pathogen in an immunocompromised subject, comprising

selecting an immunocompromised subject wherein the subject is immunocompromised as a result of an infection with a human immunodeficiency virus; and

administering to the subject a therapeutically effective amount of an immunostimulatory D oligodeoxynucleotide, wherein the D oligodeoxynucleotide is at least 18 nucleotides to about 30 nucleotides in length and comprises a sequence represented by the following formula:

5' $X_1X_2X_3$ Pu_1 Py_2 CpG Pu_3 Py_4 $X_4X_5X_6(W)_M(G)_N$-3' (SEQ ID NO : 22)

wherein the central CpG motif is unmethylated, Pu is a purine nucleotide, Py is a pyrimidine nucleotide, X and W are any nucleotide, M is any integer from 0 to 10, and N is any integer from 4 to 10,

wherein an antigenic epitope of a polypeptide from the pathogen is not administered to the subject,

thereby increasing the response to the opportunistic infection, wherein the pathogen is a *Leishmania*.

26. (Previously Presented) The method of claim 1, wherein the oligodeoxynucleotide comprises the nucleic acid sequence set forth as 5'XXTGCATCGATGCAGGGGGG 3' (SEQ ID NO: 1), wherein X is a G.

27. (Currently Amended) The method of claim 1, wherein the D oligodeoxynucleotide consists of the nucleic acid sequence set forth as SEQ ID NO: 177.

28. (Canceled).

29. (Previously Presented) The method of claim 25, wherein the D oligodeoxynucleotide consists of the nucleotide sequence set forth as SEQ ID NO: 177.

30. (Canceled).

31. (Currently Amended) The method of claim [[2]] 1, wherein the D oligodeoxynucleotide consists of the nucleotide sequence set forth as SEQ ID NO: [[177]] 178.

32-34. (Canceled).

35. (New) The method of claim 25, wherein the D oligodeoxynucleotide consists of the nucleotide sequence set forth as SEQ ID NO: 178.

36. (New) The method of claim 1, wherein the D oligodeoxynucleotide comprises the nucleotide sequence set forth as SEQ ID NO: 177.

37. (New) The method of claim 1, wherein the D oligodeoxynucleotide comprises the nucleotide sequence set forth as SEQ ID NO: 178.

38. (New) The method of claim 25, wherein the D oligodeoxynucleotide comprises the nucleotide sequence set forth as SEQ ID NO: 177.

39. (New) The method of claim 1, wherein the D oligodeoxynucleotide comprises the nucleotide sequence set forth as SEQ ID NO: 178.